

## METHOD AND APPARATUS FOR SUPPRESSING LOW FREQUENCY CONTENT IN DIGITAL DATA

### ABSTRACT OF THE DISCLOSURE

- 5           A method of encoding digital information in order to suppress dc includes the steps of receiving a sequence of  $m$  message bits of a message word, and mapping the sequence of  $m$  message bits of the message word to a codeword, of length  $n$  bits, generated from the  $m$  message bits using algebraic operations. Multiple codeword candidates are generated
- 10 from the  $m$  message bits using the algebraic operations to combine the  $m$  message bits with different periodic scrambling sequences. One of the codeword candidates is selected for mapping based upon an optimizing criteria. Second order digital sum sequences, corresponding to each of the plurality of codeword candidates, can be used as the optimizing
- 15 criteria to select the codeword.